DISTINCTIONS OF THE CLAIMED PRESENT INVENTION OVER THE PRIOR ART

In page 4, lines 3-4 of the Action, the Examiner asserts, "Applicant argues that Fargher or Matsuzaki taken singly or in combination fails to teach or suggest managing resources allocated to group of workers." However, the claim feature does not recite, "managing resources allocated to group of workers." Rather, the claims recite "storing and managing resources of jobs according to groups of workers" (claim 1, emphasis added). Further, in contrast to the Examiner's well known assertion, such claimed feature is not well known because the systems disclosed in the relied upon references provide that job resources are assigned to jobs. In contrast, in the present invention, job resources are assigned to groups of workers.

Accordingly, all well known assertions are traversed and the Applicants request adequate documentary evidence in support of any well known assertions regarding the claimed present invention. To only clarify the patentably distinguishing features (and not narrowing the scope of the claims), independent claims 1, 27, 30, 33 and 34 are amended to recite:

> a resource manager that stores groups of workers and assigns resources of jobs to the groups of workers, each resource being further allocated for use by workers of the group in performing each job to be carried out by the group, and permission information provided for each resource

More particularly, the claimed present invention provides a distinguishing way to organize information by organizing and managing information relating to resources of jobs according to groups of workers performing the jobs. In particular, in view of the primary reference Fargher, col. 7, lines 34-36, do not disclose or suggest the present invention's distinguishing feature of *storing job definitions, including job resources, according to groups of workers performing the jobs*. Therefore, in contrast to the relied upon references, the present invention stores and manages resources (typically, for example, computer resources, such as a window or a program (object), or a command, or data) of jobs according to groups of workers (i.e., group by group).

For example, the job definition form 11 organizes the jobs, which include the job resources, according to the groups (e.g., Groups A, B and C in Figs. 8, 9, and 36). Further, the resource management table 51 organizes the resources according to the groups. See, for example, the resource management table 51 in Fig. 25 (showing resources allocated to Groups) and the job definition form 11 in Fig. 36 (showing jobs A, B ... J allocated to Group C). Regarding column 1 of Fig. 25(A), if there is only one job for a group, then either the group or job name can be used in column 1.

PRIOR ART

Fargher

As the primary reference, Fargher does not disclose the details of how information is organized when planning a production schedule within a factory. Therefore, Fargher merely discloses a method for planning a production schedule within a factory (Abstract) and does not disclose "stores groups of workers and assigns resources of jobs to the groups of workers" (claim 1, emphasis added).

In particular, Fargher discloses a plan representation chosen to model the manufacturing environment. The plan representation is based on the processing capacity of resource groups within the factory. Each resource group has an associated set of processing capabilities, which every member of the group is able to perform. Since a single semiconductor manufacturing machine may perform several different processes, a machine may be a member of several different resource groups. See col. 7, lines 13-33.

Although, Fargher discloses that "a machine may be a member of several different resource groups" (col. 7, lines 25-26), Fargher discloses that the plan representation does not distinguish which resources, within a resource group, is planned to process a particular piece of work represented within a plan. In Fargher, the representation simply commits processing time for the "whole resource group" to a particular piece of work (col. 7, lines 34-36) to determine processing capacity of each resource group (Abstract). Therefore, Fargher does not relate to dynamic use of resources of jobs according to groups of workers (i.e., "stores groups of workers and assigns resources of jobs to the groups of workers, each resource being further allocated for use by workers of the group in performing each job to be carried out by the group," claim 1 emphasis added). Therefore, further, Fargher does not suggest, "maintains the security of the resources assigned to the groups using permission information" (claim 1). Because Fargher relates to planning a production schedule, there would be no motivation to combine Fargher with Matsuzaki, IBM Bulletin Disclosure and/or Rapoza.

Fargher does not disclose or suggest the present invention's distinguishing features, "stores groups of workers and assigns resources of jobs to the groups of workers, each resource being further allocated for use by workers of the group in performing each job to be carried out by the group, and permission information provided for each resource" (Fig. 36, page 27, lines 14-18 of the present Application, emphasis added). In particular, Fargher does not disclose or suggest the claimed present invention's distinguishing feature to allocate resources according to groups of workers, for example, as in the job definition form of the present invention (Fig. 36 -

showing jobs A, B ... J allocated to Group C).

Matsuzaki

Matsuzaki, merely discloses a method for supporting development and design of a new product as shown in Fig. 1. In particular, Matsuzaki organizes information relating to product development according to jobs (Fig. 2). For example, in col. 14, lines 8-12, Matsuzaki discloses an identification code identifying a responsible member responsible to the activity (job) for exchanging inquires with other members regarding job status (i.e., a responsible member is assigned to a job). Matsuzaki discloses storing resource models, however, does not disclose or suggest the details of how resource information is or should be organized/stored and how such resources are used. Therefore, it appears that in Matsuzaki, resources would be stored and managed according to jobs and not according to groups of workers. Col. 5, lines 51-55; and col. 7, lines 25-27. Further, Matsuzaki does not relate to dynamic use of resources of jobs according to groups of workers (emphasis).

Matsuzaki does not disclose or suggest the present invention's distinguishing feature, "stores groups of workers and assigns resources of jobs to the group of workers" and managing the resources according to the groups of workers via "a job monitor" and "a scheduler." (claim 1).

IBM Bulletin Disclosure

The IBM Disclosure relates to administration of computer resources in a computer system. In particular, the ACL is organized according to resources, in which identifiers (users, groups, locations, projects) requesting access to the resources are assigned to the resources. The assignment is performed according to the DAC. The DAC is based upon assigning permission information to resources. Page 2 of 2 of the IBM Bulletin Disclosure describes that identifiers (users, groups, locations, projects) are assigned to a file.

Therefore, the IBM Bulletin Disclosure also does not disclose or suggest the present invention's distinguishing feature, "stores groups of workers and assigns resources of jobs to the group of workers" (claim 1). More particularly, the IBM Bulletin's permission information does not relate to "maintains the security of the resources assigned to the groups using the permission information (claim 1, emphasis added).

Rapoza

Rapoza merely discloses project management software to provide superior workgroup features and useful planning aids. In a ManagePro window of Rapoza, a manager shares information about projects and "resources assigned to those projects," page 1, 3rd paragraph.

Therefore, Rapoza discloses that resources are assigned to projects. *See*, Rapoza, page 1, 7th and 8th paragraphs under Management Tools heading.

Although, Rapoza, page 1, 9th paragraph, lines 2-5, appears to disclose assigning tasks to employees from virtually any window, this disclosure also provides that the tasks can be assigned to employee when adding a member to the notebook testing team (i.e., members are assigned to a project as disclosed in Rapoza, page 1, 8th paragraph). Further, Rapoza's people management relates to providing feedback and performance review information and does not relate to assigning jobs to workers (Abstract). Further, although, Rapoza in page 2, 13th paragraph, appears to disclose that "ManagePro even allowed us to choose whether to use the program just to manage people, just to manage goals, or for variations on these options (emphasis added), Rapoza does not expressly disclose how job resources are stored and/or used. Therefore, according to page 1, 8th paragraph, Rapoza's configuration appears to provide assigning workers to a job. Rapoza does not disclose or suggest the present invention's distinguishing feature, "stores groups of workers and assigns resources of jobs to the groups of workers" (claim 1), providing benefits as discussed below.

CLAIM RECITATIONS OF THE PRESENT INVENTION

In contrast to the relied upon references, the present invention (as recited in amended independent claims 1, 27, 30, 33 and 34, using the recitation of claim 1 as an example) comprises:

> a resource manager that stores groups of workers and assigns resources of jobs to the groups of workers,

Further, in contrast to the relied upon references, the present invention (as recited in amended independent claim 34) comprises:

> a server coupled by the network to said file storage and to the clients, said server allocating a corresponding resource to one or more of the groups, determining whether the resource is available to a requesting group based on the allocation information, and selectively changing the allocation information by using the permission information when a job requires access to the resource (emphasis added).

Further, in contrast to the relied upon references, the present invention (as recited in amended independent claims 1 and 33, using the recitation of claim 1 as an example) comprises:

a resource manager that stores groups of workers and assigns resources of jobs to the groups of workers, each resource being further allocated for use by workers of the group in performing each job to be carried out by the group, and permission information provided for each resource;

a job monitor that monitors the jobs carried out by the groups, maintains the security of the resources assigned to the groups using the permission information, and for a first group inhibits access to the resources thereof from another group to which permission to use the resources of the first group is not allocated (emphasis added).

BENEFITS OF THE CLAIMED PRESENT INVENTION

The distinguishing information organization of the present invention argues against obviousness because of the following benefits:

A benefit of the distinguishing features is that because resource utilization is based upon group of workers, it is very easy to utilize the resources even if a worker of a group is moved from one job to another job, allowing dynamic use of plural job resources (emphasis).

Another benefit of the distinguishing features is that permission information can be provided for each resource allocated to each group. Permission information can be, for example, member contact information to directly obtain permission from a member to use a resource, and/or information on predetermined conditions to utilize a resource. Therefore, a worker can obtain permission to utilize a resource from another worker assigned to the resource even though the worker may belong to a group without permission to use the resource. According to the present invention, if a worker who belongs to a project team can utilize a resource based on the resource permission information (for example, by contacting an authorized worker), all workers who belong to the same project team can also utilize the resource.

CONCLUSION

Dependent claims 2-18, 25, 26 and 32 (depending, either directly or indirectly, from claim 1); 28-29 (depending, either directly or indirectly, from claim 27); and 31 (depending from claim 30) are also patentably distinguishing over the foregoing references at least due to their dependencies from the independent claims 1, 27 and 30.

In view of the amendments and remarks presented, withdrawal of the rejection of claims 1-18 and 25-34, and allowance of claims 1-18 and 25-34 is respectfully requested.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "**Version with markings to show changes made**."

If there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

Respectfully submitted,
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Date: May 31, 2002

By: _____
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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS

Claims 1, 27, 30, 33 and 34 are **AMENDED** as follows.

Recitation of all pending claims is provided for reference convenience.

1. (FOUR TIMES AMENDED) A system managing resources allocated to groups of workers that carry out jobs using computers, said system comprising:

a resource manager that stores [and manages]groups of workers and assigns resources of jobs [according] to the groups of workers, [the resources allocated to each group,] each resource being further allocated for use by workers of a group in performing each job to be carried out by the group, and permission information provided for each resource;

a job monitor that monitors the jobs carried out by the groups, maintains the security of the resources [allocated]assigned to the groups using the permission information, and for a first group inhibits access to the resources thereof from another group to which permission to use the resources of the first group is not allocated; and

a scheduler that schedules the jobs of each group according to a procedure specific to the group and information provided by said job monitor.

2. (as THREE TIMES AMENDED) The system according to claim 1, further comprising a job storage that stores a job definition form defining for each group the jobs, the form indicating rights to use the resources,

wherein said resource manager, job monitor, and scheduler exchange rights to use the resources among the groups according to the job definition form.

3. (as ONCE AMENDED) The system according to claim 1, further comprising a rearranging unit that manages and rearranges the members and resources of the groups according to progress of the jobs, wherein said job monitor monitors the jobs and resources of the groups according to information from said rearranging unit.

4. (as ONCE AMENDED) The system according to claim 1, wherein:

an emergency group is allowed to access every resource of every group; and

said job monitor accepts any request from the emergency group for accessing a resource.

5. (as ONCE AMENDED) The system according to claim 1, wherein said job monitor performs at least one of transferring a resource from one of the groups to another group and automatically changing the resources of any one of the groups according to a procedure.

6. (as TWICE AMENDED) The system according to claim 1, further comprising a request unit that, when a first group makes a request to use a resource of a second group, uses the permission information provided for the resource to contact the second group for permission to use the resource.

7. (as ONCE AMENDED) The system according to claim 6, wherein said request unit uses one of a telephone and a pager to request the second group for permission to use the resource.

8. (as ONCE AMENDED) The system according to claim 6, wherein said request unit uses one of a telephone, a notebook computer, an electronic notepad, and a workstation through one of a wide-area network, a personal computer communication network, and a wireless network to request the second group for permission to use the resource.

9. (as ONCE AMENDED) The system according to claim 6, further comprising a visual I/O unit and an audio I/O unit to request the second group for permission to use the resource.

10. (as ONCE AMENDED) The system according to claim 6, further comprising:

an input device, attached to a selected member of the second group, for identifying and locating the member; and

a positioning unit generating an image of the selected member, said input unit and positioning unit being used to directly request the member of the second group for permission to use the resource.

11. (as ONCE AMENDED) The system according to claim 6, wherein said job monitor holds the schedules of the jobs of the groups and exchanges the jobs among the groups.

12. (as TWICE AMENDED) The system according to claim 6, wherein said job monitor limits location, period, and each group to handle a resource, to thereby strictly maintain the security of the resource.

13. (as ONCE AMENDED) The system according to claim 6, wherein said job monitor indicates whether permission for use of the resource is to be granted upon approval of all or some of the members of the second group.

14. (as ONCE AMENDED) The system according to claim 6, wherein said job monitor adds a name of a group to which a resource belongs to a name of the resource, whereby plural resources having the same name can be allocated to the group.

15. (as ONCE AMENDED) The system according to claim 6, wherein said job monitor allocates a representative name to a set of resources and identically handles the resources under the representative name.

16. (as ONCE AMENDED) The system according to claim 10, wherein said input device is a virtual-reality device attached to the selected member, to identify the location of the member.

17. (as ONCE AMENDED) The system according to claim 10, wherein said input device is a head-mount display worn by the selected member so that the member may give permission to use the resource.

18. (as ONCE AMENDED) The system according to claim 10, wherein said input device is provided with at least one of a password and an ID, to prevent illegal access to said input device.

25. (as UNAMENDED) The system according to claim 9, wherein:
said visual I/O unit is a television camera; and
said audio I/O unit is a microphone.

26. (as UNAMENDED) The system according to claim 10, wherein:
said input unit is one of a sensor and a transmitter; and

said positioning unit is a television camera.

27. (THREE TIMES AMENDED) A method of groupwise resource management, comprising:

storing [and managing resources of jobs according to] groups of workers;

assigning[, the] resources [allocated to each group carrying out the] of jobs to the groups of workers, [using computers, and] each resource being further allocated for use by workers of the group in performing each job to be carried out by the group;

monitoring the jobs carried out by each group;

maintaining security of each of the resources [allocated]assigned to the groups;

inhibiting access to a resource of a first group from another group to which permission to use the resource of the first group is not allocated; and

scheduling the jobs carried out by each group in accordance with a procedure specific to the group and information provided through monitoring the jobs.

28. (as ONCE AMENDED) The method according to claim 27, further comprising storing a job definition form defining for each group the jobs, the form indicating rights to use the resources.

29. (as TWICE AMENDED) The method according to claim 28, wherein the job definition form identifies for each job carried out by each group, as information indicating the rights to use the resources, at least one of a job period, group members, processes, the resources allocated to the job carried out by the group, and permission information of the resources.

30. (THREE TIMES AMENDED) A computer-readable medium encoded with a program for groupwise resource management, said program including the functions of:

storing [and managing resources of jobs according to] groups of workers;

assigning[, the] resources [allocated to each group carrying out the]of jobs to the groups of workers, [using computers, and] each resource being further allocated for use by workers of the group in performing each job to be carried out by the group;

monitoring the jobs carried out by each group;

maintaining security of each of the resources [allocated]assigned to the groups;

inhibiting access to a resource of a first group from another group to which permission to

use the resource of the first group is not allocated; and

scheduling the jobs carried out by each group in accordance with a procedure specific to the group and information provided through monitoring the jobs.

31. (as TWICE AMENDED) The computer readable medium of claim 30, the program further comprising a function of storing a job definition form defining for each group the jobs, the form indicating rights to use the resources, wherein the job definition form identifies for each job carried out by each group, as information indicating the rights to use the resources, at least one of a job period, group members, the resources allocated to the job to be carried out by the group, and permission information of the resources.

32. (as TWICE AMENDED) The system according to claim 2, wherein the job definition form identifies for each job carried out by each group, as the information indicating the rights to use the resources, at least one of a job period, group members, the resources allocated to the job to be carried out by the group, and the permission information of the resources.

33. (TWICE AMENDED) A system for managing resources used by groups of workers carrying out jobs through computers, said system comprising:

a resource manager to store [allocation of a specified resource to] one or more groups of workers, to assign a specified resource to the groups of workers, to store permission information for the specified resource, and to determine whether the specified resource is available to a first group based on the [allocation]assignment information; and

a job monitor to receive from said resource manager information indicating whether the specified resource is available to the first group, and to request permission for the first group to access the specified resource from a second group to which the resource is [allocated]assigned, using the permission information of the specified resource, when the received information indicates the specified resource is not available to the second group.

34. (TWICE AMENDED) A system for managing resources used by groups of workers carrying out jobs through network clients, said system comprising:

a file storage to store files of resources and to store permission information for the resources, whereby groups of workers can access the resources through clients over a network; and

a server coupled by the network to said file storage and to the clients, said server [storing

allocation of]allocating a corresponding resource to one or more of the groups, determining whether the resource is available to a requesting group based on the allocation information, and selectively changing the allocation information by using the permission information when a job requires access to the resource.